

Claims

1. A linear device which is a linear member comprising:

a base layer extending in the axial directions of the linear member; and

a plurality of layers formed on the base layer and extending in the axial directions of the linear member,

one of said plurality of layers being a conductive layer and one of said plurality of layers being an insulating layer.

2. The linear device according to claim 1, wherein the front end of the linear member is pointed.

3. The linear device according to claim 1 or 2, wherein:

the conductive layer is formed on one side of the base layer;

the insulating layer is formed so as to cover the surface of the conductive layer; and

the conductive layer is exposed at the front end of the linear member to constitute a contacting part.

4. The linear device according to claim 3, wherein a platinum layer is formed on the contacting part.

5. The linear device according to claim 1, 2, 3, or 4, wherein two or more of said plurality of layers are conductive layers and two or more of said plurality of layers are insulating layers, each insulating layer being disposed between the conductive layers.

6. The linear device according to claim 1, 2, 3, 4, or 5, wherein one of said plurality of layers is of a superelastic alloy.

7. The linear device according to claim 1, 2, 3, 4, or 5, wherein one of said plurality of layers is of a superelastic resin.

8. The linear device according to claim 1, 2, 3, 4, 5, 6, or 7, wherein one of said plurality of layers is of a shape-memory material.

9. The linear device according to claim 1, 2, 3, 4, 5, 6, 7, or 8, wherein the width of the linear member is 1–200 μm .

10. The linear device according to claim 1, 2, 3, 4, 5, 6, 7, 8, or 9, wherein the linear member has an axial core serving as the base layer.

11. The linear device according to claim 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, wherein a detecting agent, which reacts on a certain substance to produce another one, is applied to the surface of one of the conductive layers at the front end of the linear member.

12. The linear device according to claim 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or 11, wherein one side of the front end of the linear member is provided with a treating region which includes conductive surfaces and insulating surfaces arranged alternately in the directions of the longitudinal center axis of the linear member, each conductive surface being part of the outer surface of one of the conductive layers and each insulating surface being part of the outer surface of one of the insulating layers.

13. The linear device according to claim 12, wherein the front end of the linear member is provided with a protector of an insulating material to cover the front end.